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| APPLICATION NO..  | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 10/634,030  | 08/04/2003  | Takemi Muroga        | Komatsu Case 291    | 5287             |
| 23474   | 7590        | 07/22/2005           | EXAMINER            |                  |
| FLYNN THIEL BOUTELL & TANIS, P.C.<br>2026 RAMBLING ROAD<br>KALAMAZOO, MI 49008-1631 |             |                      | COOKE, COLLEEN P    |                  |
|   |             |                      | ART UNIT            | PAPER NUMBER     |
|   |             |                      | 1754                |                  |

DATE MAILED: 07/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                              |                     |  |
|------------------------------|------------------------------|---------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b>       | <b>Applicant(s)</b> |  |
|                              | 10/634,030                   | MUROGA ET AL.       |  |
|                              | Examiner<br>Colleen P. Cooke | Art Unit<br>1754    |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 04 August 2003.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-15 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- 1) Notice of References Cited (PTO-892)  
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  
 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
 Paper No(s)/Mail Date 8/4/03.
- 4) Interview Summary (PTO-413)  
 Paper No(s)/Mail Date. \_\_\_\_\_.  
 5) Notice of Informal Patent Application (PTO-152)  
 6) Other: \_\_\_\_\_.

***Priority***

Acknowledgment is made of applicant's claim for foreign priority based on an application filed in Japan on 8/6/02. It is noted, however, that applicant has not filed a certified copy of the Japanese application as required by 35 U.S.C. 119(b).

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-15 are rejected under 35 U.S.C. 102(b, e, or a) as being anticipated by Honjo et al. (US 2002-0076567).

Regarding claims 1-4, 7, 13, and 15, Honjo et al. teaches an oxide superconductor having a Hastelloy substrate, and IBAD-YSZ layer on the substrate, followed by a CeO<sub>2</sub> layer and lastly a Y123 layer (see Figure 1). Honjo et al. further teaches that the YSZ layer is 1µm thick and the CeO<sub>2</sub> layer is 0.5 µm thick (Example 1, paragraph 0060; also in Example 2 paragraph 0081).

Regarding claims 5, 6, and 8, referring particularly to the orientation of the IBAD-YSZ and CeO<sub>2</sub> layers, Honjo et al. teaches that the layers have certain alignment (paragraphs 0044, 0045, 0047, 0058, 0059, and 0069) which would appear to meet the claimed limitations. Furthermore, since Honjo et al. teaches the exact same materials formed by the same processes, the intermediate and cap layers of Honjo et al. would inherently possess the claimed orientation properties.

Art Unit: 1754

With respect to each of claims 9, 10, 11, 12, and 14, it appears that the instantly claimed product by process is the same as that which is claimed (a layered superconductor consisting of a Hastelloy substrate, IBAD-YSZ layer, CeO<sub>2</sub> layer and Y123 layer). When the examiner has found a substantially similar product as in the applied prior art, the burden of proof is shifted to the applicant to establish that their product is patentably distinct and not the examiner to show the same process as making. *In re Brown*, 173 USPQ 685 and *In re Fessman*, 180 USPQ 324.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Colleen P Cooke whose telephone number is 571-272-1170. She can normally be reached Mon.-Thurs. 8am-6:30pm.

If attempts to reach the examiner by telephone are unsuccessful, her supervisor, Stan Silverman can be reached at 571-272-1358. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

*Colleen P. Cooke 4/24/05*  
Colleen P Cooke  
Primary Examiner  
Art Unit 1754